Amendments to the Claims

1. (Currently Amended) A connector assembly for detachably coupling a proximal end of a lead and an implantable medical device, comprising:

a deflectable substantially U-shaped connector clip including a first deflectable arm with a free end, a second deflectable arm with a free end, and a top portion extending between the first arm and the second arm, the first arm and the second arm detachably positioning the proximal end of the lead within the implantable medical device;

a housing portion forming a connector block having a front end with a connector port and having a longitudinal channel extending along a central axis within the housing portion to receive the proximal end of a lead, the connector block further having a connector clip aperture to provide side access to the channel and receive the U-shaped connector clip with the free ends of the arms extending perpendicular to the central axis as the connector clip is positioned within the channel via the connector clip aperture; and

a first deflection portion spanning across the connector clip aperture, the first deflection portion fitting between free ends of the first arm and the second arm upon insertion of the connector clip within the connector clip aperture, the first deflection portion causing the connector clip to deflect from a first position corresponding to a first distance between the first arm and the second arm upon ~~partial~~ insertion of the connector clip into the connector clip aperture, to a second position corresponding to a second distance, greater than the first distance, between the first arm and the second arm ~~upon complete insertion of the connector clip into the connector clip aperture~~.

2. (Canceled)

3. (Currently Amended) The connector assembly of claim 1, wherein the ~~second distance is greater than the first distance and the~~ proximal end of the lead further deflects the connector clip from the second position to a third position, corresponding to a third distance between the first arm and the second arm greater than the second distance, the connector clip detachably engaging and electrically coupling the proximal end of the lead to the implantable medical device as the proximal end of the lead is inserted within the channel via the connector port.

4. (Previously Presented) The connector assembly of claim 1, wherein the first arm and the second arm extend within the channel and are engaged against and electrically couple the proximal end of the lead as the proximal end of the lead is inserted within the channel via the connector port.

5. (Previously Presented) The connector assembly of claim 1, further comprising a second deflection portion engaging the top portion of the connector clip when the connector clip is in the second position.

6. (Previously Presented) The connector assembly of claim 1, further comprising a seal member, wherein the housing portion forms a second aperture in fluid communication with the channel, the seal member being insertable within the channel via the second aperture and sealably engaging about the proximal end of the lead as the proximal end of the lead is inserted within the channel via the connector port.

7. (Original) The connector assembly of claim 1, wherein the first deflection portion includes a tapered portion engaging the connector clip as the connector clip is deflected from the first position to the second position.

8. (Original) The connector assembly of claim 5, wherein at least one of the first deflection portion and the second deflection portion includes a tapered portion engaging the connector clip as the connector clip is deflected from the first position to the second position.

9. (Original) The connector assembly of claim 3, further comprising:

a first flange positioned along the first arm and extending outward toward the second arm; and

a second flange positioned along the second arm and extending outward toward the first arm, wherein the first flange and the second flange extend within the channel when the connector pin is in the second position.

10. (Original) The connector assembly of claim 9, wherein one or both of the first flange and the second flange include a tapered portion to facilitate deflection of the connector clip from the second position to the third position as the proximal end of the lead is inserted within the channel via the connector port.

11. (Original) The connector assembly of claim 3, wherein the first deflection portion includes a first side wall and a second side wall, the first arm engaged against the first side wall and the second arm engaged against the second side wall in response to the connector clip being in the second position, and wherein the first arm is spaced from the first side wall and the second arm is spaced from the second side wall in response to the connector clip being in the third position.

12. (Original) The connector assembly of claim 9, wherein the first deflection portion includes a first side wall and a second side wall, the first arm engaged against the first side wall and the second arm engaged against the second side wall in response to the connector clip being in the second position, and wherein the first arm is spaced from the first side

wall, the second arm is spaced from the second side wall, and the first flange and the second flange are engaged against the proximal end of the lead in response to the connector clip being in the third position.

13. (Canceled)

14. (Original) The connector assembly of claim 1, further comprising a protrusion formed along an inner portion of the first arm and the second arm, the protrusion including a tapered portion engaging against the proximal end of the lead as the lead is advanced through the connector clip.

15. (Original) The connector assembly of claim 3, wherein the first arm and the second arm are engaged against the first engagement portion when the connector clip is in the second position, and extend outward from the first engagement portion when the connector clip is in the third position.

16. (Currently Amended) An implantable medical device, comprising:

a housing portion forming a connector block having a front end with a connector port and having a longitudinal channel extending along a central axis within the housing portion to receive a proximal end of a lead;

a connector assembly having a deflectable substantially U-shaped connector clip including a first deflectable arm with a free end, a second deflectable arm with a free end, and a top portion extending between the first arm and the second arm, the first arm and the second arm detachably positioning the proximal end of the lead within the implantable medical device;

the housing connector block further having a connector clip aperture to provide side access to the channel and receive the U-shaped connector

clip with the free ends of the arms extending perpendicular to the central axis as the connector clip is positioned within the channel via the connector clip aperture; and

a first deflection portion spanning across the connector clip aperture, the first deflection portion fitting between free ends of the first arm and the ~~second arm~~ second arm upon insertion of the connector clip within the connector clip aperture, the first deflection portion causing the connector clip to deflect from a first position corresponding to a first distance between the first arm and the second arm upon ~~partial~~ insertion of the connector clip into the connector clip aperture, to a second position corresponding to a second distance, greater than the first distance, between the first arm and the second arm ~~upon complete insertion of the connector clip into the connector clip aperture~~.

17. (Canceled)

18. (Currently Amended) The device of claim 16, wherein the ~~second distance is greater than the first distance and the~~ proximal end of the lead further deflects the connector clip from the second position to a third position, corresponding to a third distance between the first arm and the second arm greater than the second distance, the connector clip detachably engaging and electrically coupling the proximal end of the lead to the implantable medical device as the proximal end of the lead is inserted within the channel via the connector port.

19. (Previously Presented) The device of claim 16, wherein the first arm and the second arm extend within the channel and are engaged against and electrically couple the proximal end of the lead as the proximal end of the lead is inserted within the channel via the connector port.

20. (Previously Presented) The device of claim 16, further comprising a second deflection portion engaging the top portion of the connector clip when the connector clip is in the second position.

21. (Previously Presented) The device of claim 16, further comprising a seal member, wherein the housing portion forms a second aperture in fluid communication with the channel, the seal member being insertable within the channel via the second aperture and sealably engaging about the proximal end of the lead as the proximal end of the lead is inserted within the channel via the connector port.

22. (Original) The device of claim 16, wherein the first deflection portion includes a tapered portion engaging the connector clip as the connector clip is deflected from the first position to the second position.

23. (Original) The device of claim 20, wherein at least one of the first deflection portion and the second deflection portion includes a tapered portion engaging the connector clip as the connector clip is deflected from the first position to the second position.

24. (Original) The device of claim 18, further comprising:

a first flange positioned along the first arm and extending outward toward the second arm; and

a second flange positioned along the second arm and extending outward toward the first arm, wherein the first flange and the second flange extend within the channel when the connector pin is in the second position.

25. (Original) The device of claim 24, wherein one or both of the first flange and the second flange include a tapered portion to facilitate deflection of the connector clip from the second position to the third

position as the proximal end of the lead is inserted within the channel via the connector port.

26. (Original) The device of claim 18, wherein the first deflection portion includes a first side wall and a second side wall, the first arm engaged against the first side wall and the second arm engaged against the second side wall in response to the connector clip being in the second position, and wherein the first arm is spaced from the first side wall and the second arm is spaced from the second side wall in response to the connector clip being in the third position.

27. (Original) The device of claim 24, wherein the first deflection portion includes a first side wall and a second side wall, the first arm engaged against the first side wall and the second arm engaged against the second side wall in response to the connector clip being in the second position, and wherein the first arm is spaced from the first side wall, the second arm is spaced from the second side wall, and the first flange and the second flange are engaged against the proximal end of the lead in response to the connector clip being in the third position.

28. (Canceled)

29. (Original) The device of claim 16, further comprising a protrusion formed along an inner portion of the first arm and the second arm, the protrusion including a tapered portion engaging against the proximal end of the lead as the lead is advanced through the connector clip.

30. (Original) The device of claim 18, wherein the first arm and the second arm are engaged against the first engagement portion when the connector clip is in the second position, and extend outward from the first engagement portion when the connector clip is in the third position.